# STRIVING FOR COMPREHENSIVE WATERSHED MANAGEMENT & LOCAL CONSENSUS

- Russian River Watershed Management and Protection Study
- San Pablo Bay Watershed Study
- Napa Valley Watershed Management Study

## RUSSIAN RIVER WATERSHED MANAGEMENT & PROTECTION STUDY

### **Supporting Active Community Involvement**

RUSSIAN RIVER WATERSHED COUNCIL

www.spn.usace.army.mil/russian



### RUSSIAN RIVER WATERSHED EFFORT

- 1,485 SQUARE MILES
- SONOMA AND MENDOCINO COUNTIES
- SIGNED FEASIBILITY COST SHARING AGREEMENT JUNE 2000
- \$6.2 MILLION EFFORT
- 5 YEARS PHASE I 2 years
  PHASE II 3 year
- ADDRESS LOCAL ISSUES OF CONCERN

#### **Federal Listed Species**

- Coho and Chinook Salmon
- Steelhead Trout
- Section 7 National Marine Fisheries Service, Sonoma County Water Agency, & Corps of Engineers.



**CHINOOK SALMON** 



**COHO SALMON** 





STEELHEAD TROUT



FISHING TRIP

### EEL RIVER WATER DIVERSION

Diversion of an average of 160,000 acre feet per year of Eel River water into the Russian River

(about 10% of the Russian River's average annual flow)



VanArsdale Dam - Eel River Watershed



**Upper Limit of Diversion Tunnel - Eel River Watershed** 



**Lower Diversion Piping - Russian River Watershed** 



**Eel River water released from power station - Potter Valley** 

#### **DAMS**

U.S. Army Corps of Engineers
COYOTE DAM/LAKE MENDOCINO
WARM SPRINGS DAM/LAKE SONOMA
(water supply, flood control & recreation)

over 500 detention dams privately or publicly owner and operated



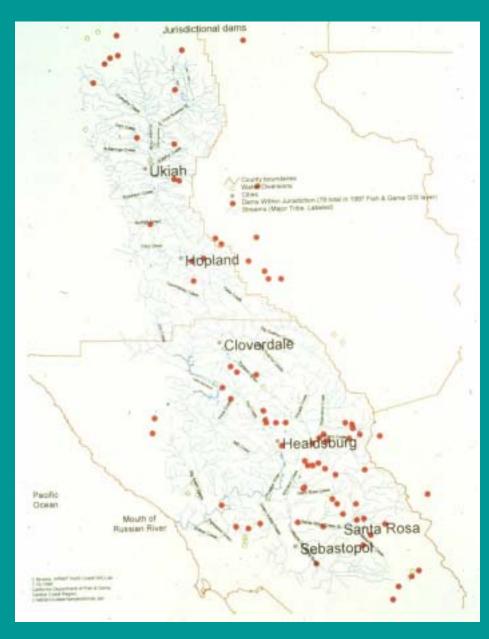
LAKE MEDOCINO



LAKE SONOMA



"Hungry Water" - released from Warm Springs Dam



**Over 500 Privately-Owned Detention Ponds** 

#### RUSSIAN RIVER WATER SUPPLY

- provides water for 500,000 people in Mendocino, Sonoma, and Marin Counties
- Intensive agricultural use



Sonoma County Water Agency Rubber Inflatable Dam (normally inflated June though October)



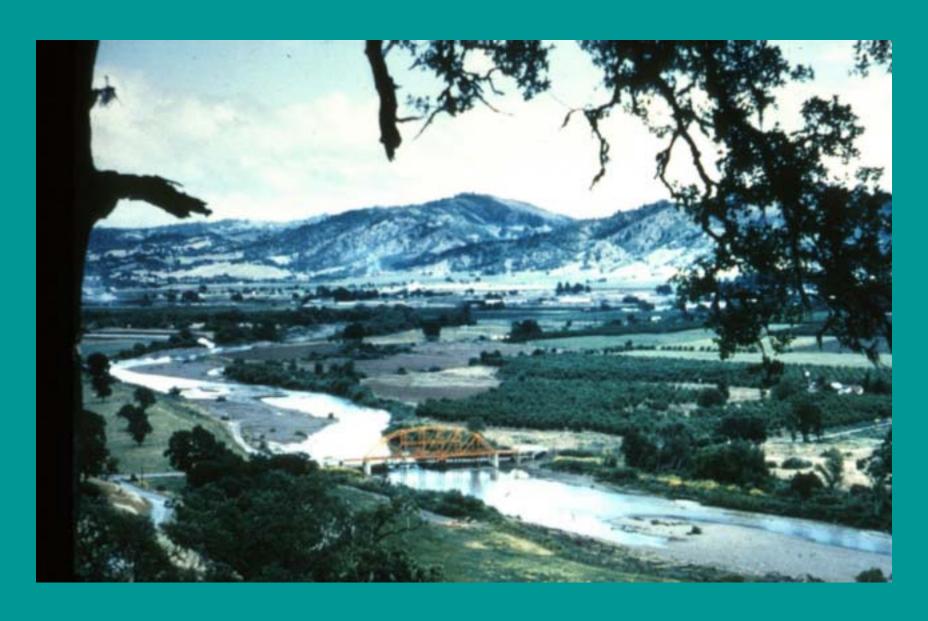
**Pumping Stations - Water Diversion** 



**Intensive Agricultural Water Use** 

## EROSION, MASS WASTING & GRAVEL

- Natural Process Impacted by the Use of Watershed Resources
- Roadways Private and Public
- Agricultural Uses



**Historical Poster - showing Meandering Channel** 



**Erosion Impacting Railroad Tracks** 



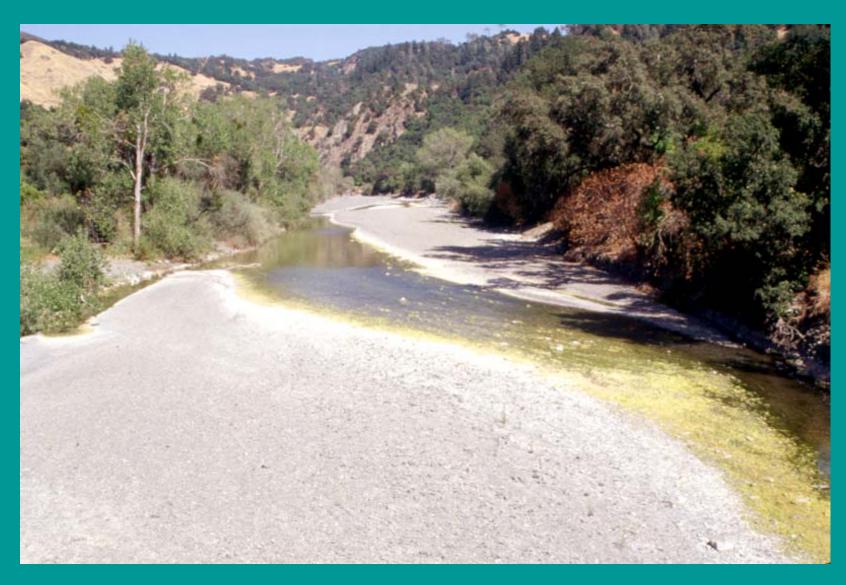
30 ft. Bank Erosion



**Road Cut Erosion** 



**Bridge Support Failure - Downcutting of Stream** 



Mass Wasting in Little Sulphur Creek - Upstream



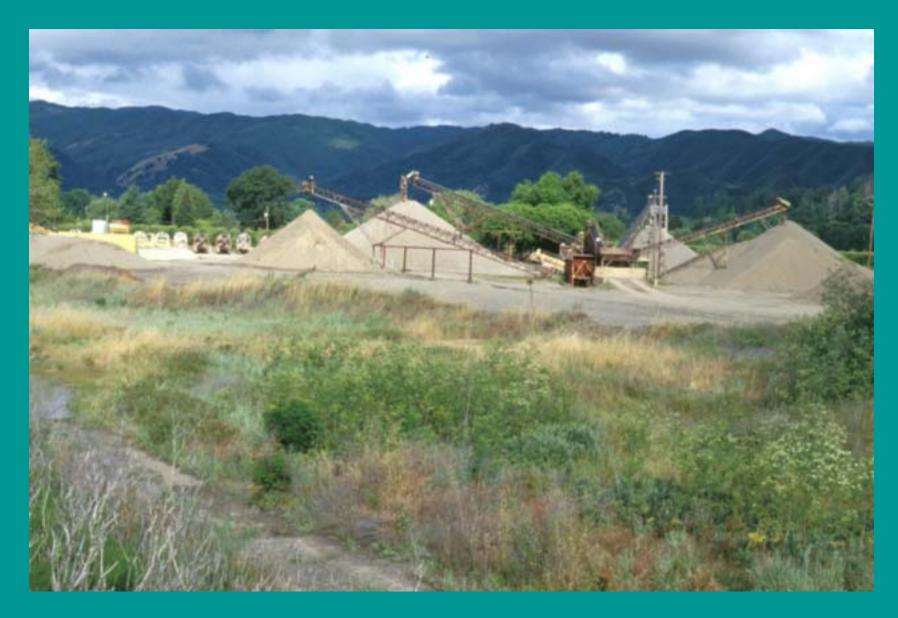
Mass Wasting in Little Sulphur Creek - Downstream



**Gravel Deposition** 



**Gravel Deposition - Bank Erosion** 



**Gravel Mining Operation** 



**Intensive Agricultural Landuse Challenges** 



**Sediment Laden Russian River** 

## INVASIVE SPECIES & & LIVESTOCK MANAGEMENT



Arundo dornex



**Livestock Impacts on Riparian Vegetation** 

# RUSSIAN RIVER WATERSHED COUNCIL

Community Involvement
Can Make the Difference

#### RUSSIAN RIVER WATERSHED COUNCIL

The mission of the Russian River Watershed Council is to protect, restore, and enhance the biological health of the Russian River and its watershed through a community-based process, which facilitates communication and collaboration among all interested parties.

#### Our primary goals are:

- 1)To ensure the recovery of the Russian River and its watershed to a condition such that the native wild anadromous fishery recovers to a healthy and sustainable level;
- 2) To ensure a strong, healthy, and diverse economy in the Russian River region; and
- 3) To promote stewardship of the Russian River and its watershed by developing an informed and engaged citizenry.



**Russian River Watershed Council Voting** 

#### RUSSIAN RIVER WATERSHED COUNCIL

57 voting members with alternates, comprised of 3 caucus groups:

18 member ECONOMIC CAUCUS

18 member ENVIRONMENTAL CAUCUS

18 member PUBLIC CAUCUS

plus 3 members from Resource Conservation Districts representing the Russian River Watershed

Supported by: 20 member ex-officio AGENCY CAUCUS

**RRWC Steering Committee** 

9 members - 3 members from each caucus group





**Mendocino County Supervisor Richard Shoemaker** 



**Sonoma County Supervisor Mike Rielly** 



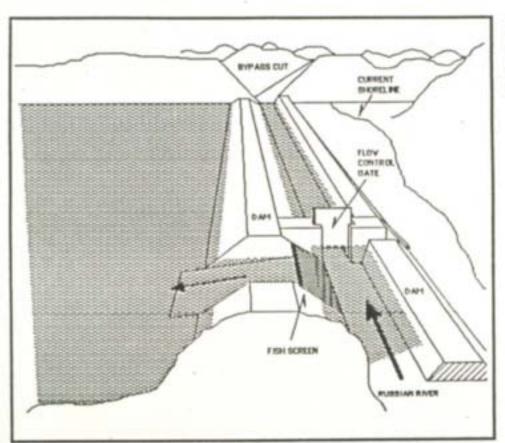
**Discussion and Comments of Goals** 



**RRWC** Members signing up for Workgroups

## 7 WORK GROUPS

- Public Outreach & Education
- Watershed Information, Assessment & Monitoring
- Salmonid Restoration
- Dam Operations
- Water Quality, Supply, & Quantity
- Tributary Cleanup
- Budget



#### FIGURE 1,

Conceptual view of how the bypass channel would be situated at the north end of Lake Mendocino.

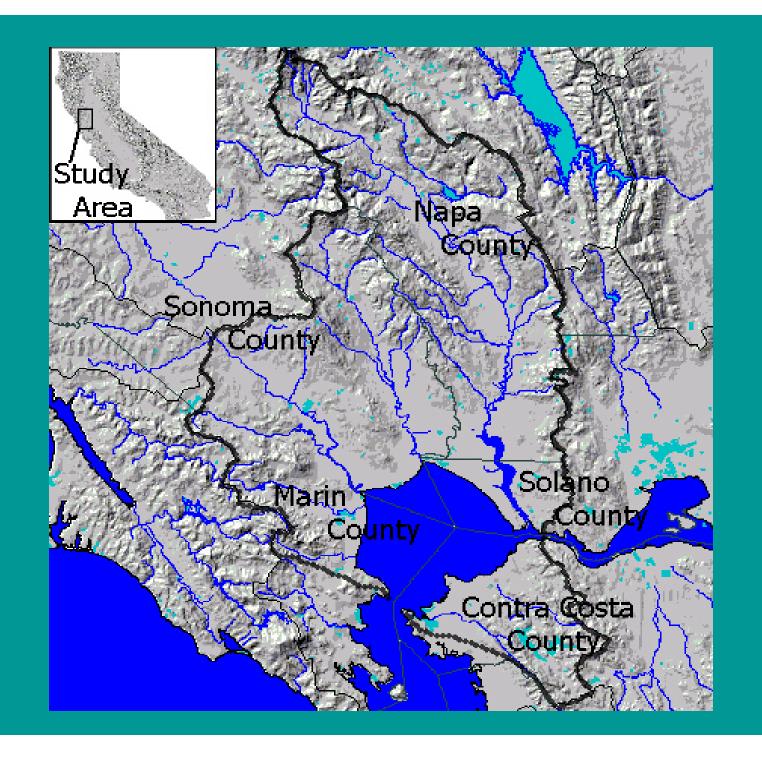
### **Coyote Dam Fishway Proposal**

## **NEXT STEPS**

- State support for a local RRWC Coordinator
- Biological Assessment of Selected Tributaries
- Development of Russian River Interactive Digital Library
- Water Rights Law Seminar
- Russian River Watershed Council Brochure
- Willow Creek Restoration Project proposal
- Coyote Dam Fishway proposal
- Scientific Panel

# San Pablo Bay Watershed

- 5 Counties Marin, Sonoma, Napa, Solano, Contra Costa
- 810 square miles catchment basin
- A complex area of historic baylands, tidal marsh, riverine estuarine systems, riparian corridors, and tributary stream channels
- Signed FCSA June 1999
- A \$5.2 Million 3 Year Effort www.spn.usace.army.mil/sanpablobay

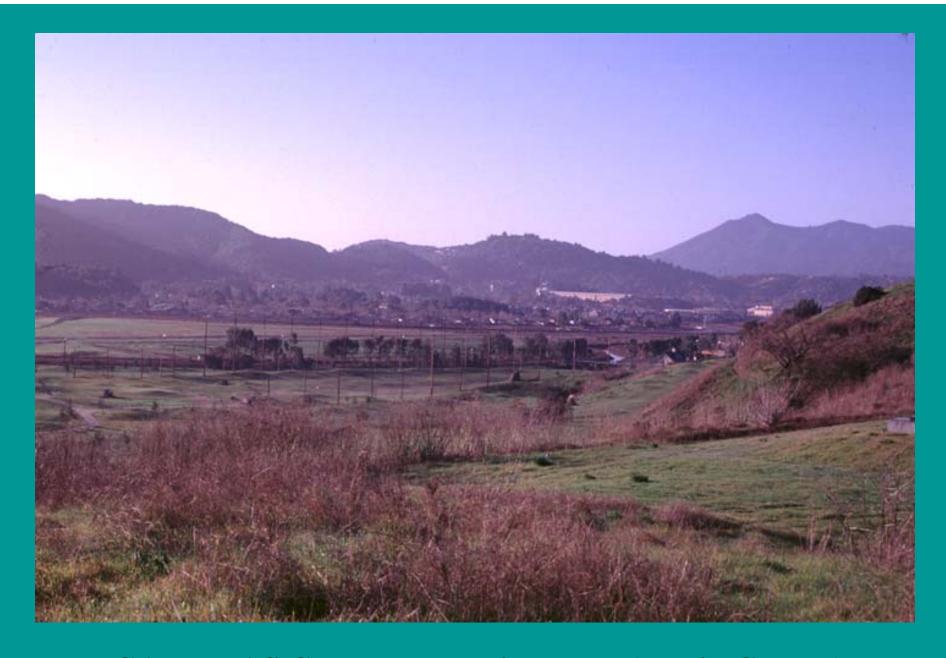




SAN PABLO BAYLANDS (Napa & Sonoma Counties)



SAN PABLO BAYLANDS (Sonoma & Marin Counties)



**GALLINAS CREEK - Looking West (Marin County)** 



**SONOMA CREEK (Sonoma County)** 



American Canyon Creek and Wetland (Napa & Solano Counties)



**PINOLE CREEK - Looking East (Contra Costa County)** 

#### San Pablo Bay Watershed Local Involvement

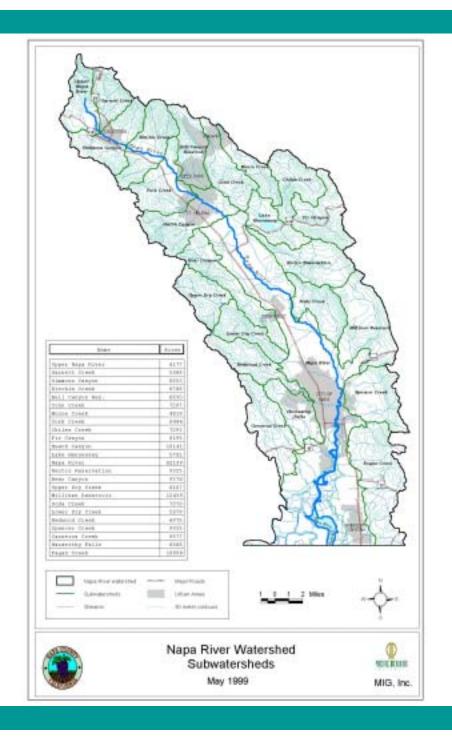
- •PLANNING COMMITTEE: California State Coastal Conservancy, U.S. Army Corps of Engineers, and the non-profit San Francisco Bay Institute.
- •SCIENTIFIC & TECHNICAL REVIEW PANEL: U.S. Fish and Wildlife Service, Napa County Resource Conservation District, San Francisco Bay Regional Water Quality Control Board, San Francisco Estuary Project, Coastal Conservancy, Environmental Protection Agency, San Francisco Bay Joint Venture, Southern Sonoma Resource Conservation District, California Department of Fish and Game.
- •SCOPING COMMITTEE: Marin County Audubon Society, Ducks Unlimited, Counties and Cities representatives, Waterways Restoration Institute, Parks and Recreational Districts, Water Supply and Water Discharge Districts, other interested parties.

# **NEXT STEP**

- Complete Framework Plan November 2000
- Spin-off Sonoma Creek Watershed Restoration Effort
- Submit American Canyon Creek & Wetland Restoration Project
- Develop Pinole Creek Restoration Project
- Develop Gallinas Creek Restoration Project

# NAPA VALLEY WATERSHED

- 400 square miles catchment basin
- Riverine and estuarine systems, riparian corridors, oak woodlands, and tributary stream channels - 47 major tributaries to the Napa River
- FCSA projected for November 2000
- \$5.5 Million 5 Year Effort

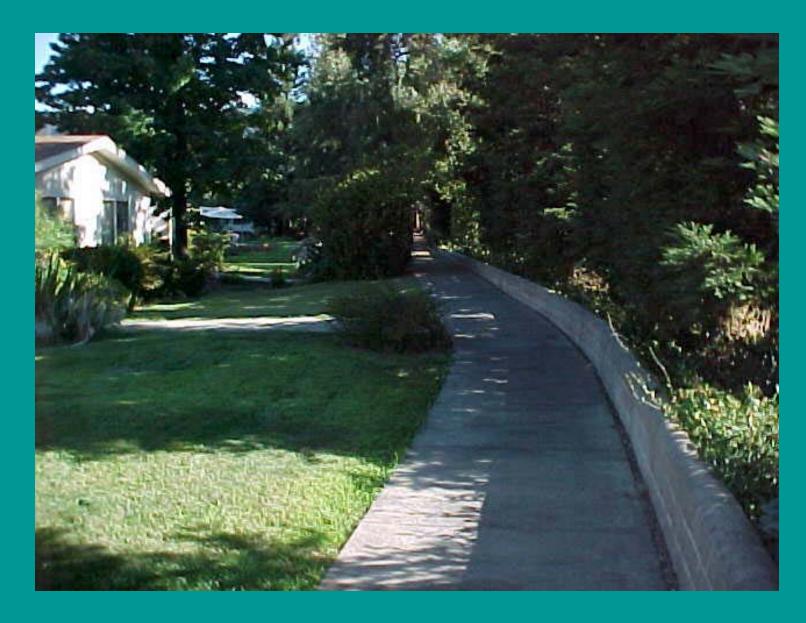




**Garrnett Creek (near Calistoga)** 



Napa River (near St. Helena) adjacent to mobile home park



Vineyard Valley Mobile Home Park



Napa River (looking south)



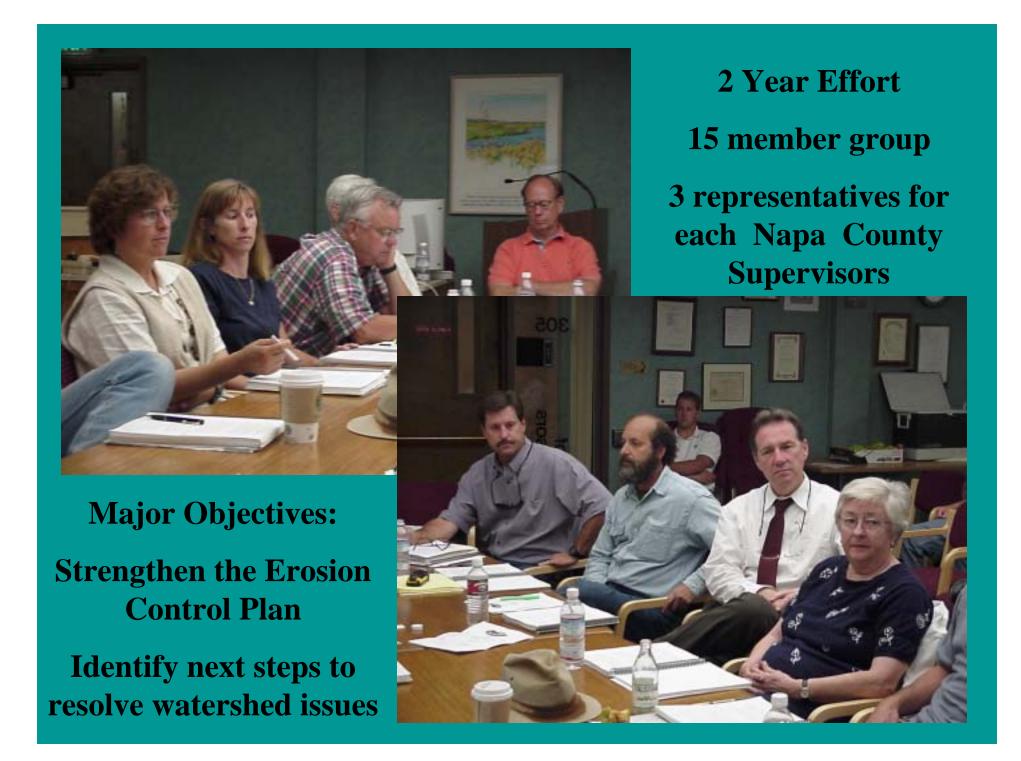
**Hopper Creek (Yountville)** 



**Hopper Creek (adjacent to mobile home park)** 



**Napa County Watershed Task Force** 



# **NEXT STEPS**

- Support Napa County Watershed Task Force recommends
- Napa Valley Watershed Conservancy
- Napa Valley Watershed Information Center
- Napa Valley Adaptive Watershed Management Plan

## WHY WATERSHEDS?

- LOCAL COMMUNITIES IDENTY WITH "THEIR" WATERSHED
- MORE INCLUSIVE OF DIVERSE COMMUNITY NEEDS
- WATERSHEDS ARE DISCRETE SYSTEMS THAT CAN BE MODELED

## A COMPREHENSIVE WATERSHED APPROACH

ADDRESSES THE INCREASING DEMANDS PLACED ON OUR NATION'S WATER RESOURCES



FACILITATES THE PRESERVATION
AND PROTECTION OF OUR WATER
RESOURCES FOR FUTURE
GENERATIONS